REPORT
OF WATER PROJECT
AT MOKKHOKANG VILLAGE
PAKBENG DISTRICT
OUDOMXAY PROVINCE, LAO PDR
June 19, 2013

SUPPORTED BY LAO REHABILITATION FOUNDATION
# CONTENT

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>3</td>
</tr>
<tr>
<td>Background information</td>
<td>4</td>
</tr>
<tr>
<td>Objective</td>
<td>5</td>
</tr>
<tr>
<td>Partner</td>
<td>5</td>
</tr>
<tr>
<td>Building Material</td>
<td>5</td>
</tr>
<tr>
<td>Activity Performed</td>
<td>6</td>
</tr>
<tr>
<td>Budget and Expenditure</td>
<td>9</td>
</tr>
<tr>
<td>Hand-Over</td>
<td>9</td>
</tr>
<tr>
<td>Outcome</td>
<td>10</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>10</td>
</tr>
<tr>
<td>Recommendations</td>
<td>10</td>
</tr>
<tr>
<td>Future Plan</td>
<td>11</td>
</tr>
<tr>
<td>Photo of Before and After</td>
<td>12</td>
</tr>
<tr>
<td>Thank You Document</td>
<td>13</td>
</tr>
</tbody>
</table>
Title: Gravity Water Project for Mokkhokang Village, a village with a population of 650 people (Khmou and Khmong) located in Pakbeng District, Oudomxay Province, Lao PDR.

Aim: To improve the overall health of people in remote villages by giving villagers access to clean water.

Methodology: Implemented under a MOU between the Ministry of Public Health and LRF, the project was managed by engineers of Oudomxay Provincial Water Unit, the Public Health Department and Houn district. Labor was performed by villagers. The work started in early January 2013 and was completed in June 2013. It involved the construction of 2 spring water dams, 1 large tank, a medium size tank and 2 small tanks distributing water to 10 taps. The total budget and expenditure was $21,001 USD, supported by LRF in the amount of $18,678 USD and by the village community with a contribution of $2,323 USD.

Result: This project is helping the people of Mokkhokang by having access to clean water for drinking and cooking. It will significantly improve the overall health of villagers by reducing the spread of water born diseases such as diarrhea and typhoid.
I. BACKGROUND INFORMATION

Mokkhokang village is located at 24 Km of dirt road from Road 13 in Pakbeng district, Oudomxay province, Lao PDR. The village consists of 102 houses, 117 families with a population of 654 (351 women). People are generally poor. The economy is mainly agricultural, growing corn in dry fields and raising livestock.

Mokkhokang village is populated by 2 ethnic groups, Hmong and Khmou, each with their own identity, culture, traditions, costumes and languages. The village does not have access to clean water and has no latrines. The villagers rely on a small river that flows near the village for drinking, bathing and washing clothes. Water must be boiled for drinking. During the rainy season the water is very cloudy, in the dry season it is limited and very dirty. Women and children work hard to bring water from the river to their houses. Diarrhea and typhoid are common diseases year long.

Education: there is a primary school with 125 students and a secondary school with 82 students (Dec. 2012).

Public health: there is a small health center providing service to 7 villages.
Health Care Center

Secondary School
II. OBJECTIVE

To improve the living conditions and the overall health of people in remote villages by giving them easy access to clean water year-long.

III. PARTNERS

Country Level: Ministry of Health, Dept. of Water Supply and the Environment
Provincial Level: Dept. of Oudomxay Provincial Public Health (Water Unit)
District Level: Dept. of Pakbeng District Public Health
Village Level: Head of Village, Head of Youth and Volunteer Health Worker

IV. BUILDING MATERIALS

All building materials used for the construction of this project were of good quality obtained from one of three bidding companies. Framing wood for the construction of concrete reservoirs and labor was provided by the village.

V. ACTIVITIES PERFORM

4.1 Preparation

Cooperated with LRF, Ministry of Health, Provincial, District and Village levels. Site surveyed on December 19, 2012 by teamwork of Pakbeng District Public Health and Oudomxay Water Unit, Public Health Dept.

MOU between LRF and Oudomxay Provincial Public Health signed January 7, 2013.
4.2 Construction

Work started on February 01, 2013 under the management of the engineer of Oudomxay Provincial Water Unit Public Health Dept. and Pakbeng District. 120 villagers participated to the construction effort.

There were 6 phases of construction:

1. Construct a dam at 2 spring areas (3.0m x 3.10m x 70cm).

2. Dig a trench from one spring area to a large tank in the village and to 7 delivery taps. Dig a trench from a second spring area to a smaller tank and to 2 water delivery taps, at the health center and at the secondary school. Pipe was buried 70cm below the surface.

3. Construct 4 concrete reservoirs, the large one being 3.6m x 3.6m x 1.5m with a net content of 15,000m3 (flow rate: 18L/minute by gravity). Construct one medium reservoir for water to be pumped to 2 smaller tanks to provide water to the health center and to the secondary school.
4. Install a pumping system to send water from the medium reservoir to the health center and to the secondary school reservoirs.
5. Construct a total of 10 water delivery taps, 7 throughout the village, 1 at the health center, 1 at the elementary school, 1 at the secondary school.

6. Teach villagers how to maintain the system. Establish a primary committee of 3 people to supervise 10 sub-committees responsible to maintain the system in their area.

VI. BUDGET AND EXPENDITURE

The total budget for this project was **21,001.00 USD** (twenty one thousand and one USD). The cost of the project was funded by LRF in the amount of 18,678.00 (89%) and by the local community in the amount of 2,323.00 USD (11%).

VII. HAND-OVER

A hand-over ceremony took place on June 19, 2013 at the primary school of Mokhokang village. In attendance were Dr. Luc Janssens, President of LRF, Mr. Ketsana Sabanhack, Community Party of Pakbeng District and Dr. Boulian Vongpasith, Deputy Director of Oudomxay Provincial
Public Health, along with partners (Oudomxay and Pakbeng Water Units, Pakbeng District Public Health, Head of Village and Villagers).

VII. OUTCOME

The project is bringing clean water to a population of over 650 Khamou and Hmong people in this remote village. Having access to water at the schools and health center will improve quality of life particularly for women and children. It will prevent diarrhea, typhoid fever and other diseases associated with contaminated water.

IX. WEAKNESSES

The project was not completed by the date specified in the MOU. The Project Committee and the engineer did not monitor the project diligently as agreed upon which resulted in having to redo parts of the project. Water flow from one spring is less than anticipated in the months of May and June.

X. RECOMMENDATIONS

We recommend that an engineer be on site during all phases of the project and that Project Committee visit project sites with greater frequency.
XI. FUTURE PLANS

LRF is considering support for 2 additional water projects in 2014: Taleuv of Houn District, a Khamou village with a population of 663 and Huilapeu of Nga District, a Khamou and Hmong village with a population of 459.
PHOTOS: WATER ACCESS BEFORE AND AFTER IMPLEMENTATION OF THE PROJECT

BEFORE:

AFTER:
THANK YOU DOCUMENT